

## CLAIMS:

1. A medical diagnostic apparatus comprising a drive system (15) for positioning a radiation source (3) facing a radiation detector (5) relative to a target object (9), the apparatus comprising a frame (11) and a support (1) for the radiation source (3) and the radiation detector (5), which support is bearing-mounted and rotatable with respect to the frame (11), the support via a central position relative to the frame (11) being rotatable between a first and a second extreme position, characterized in that the drive system (15) comprises first and second timing pulleys (19, 21), at least one of the first and second timing pulleys (19, 21) being drivable by a drive element (27) and the drive system (15) further comprising a belt (17) which is attached to the support (1) via a first and a second connection point (23, 25), wherein, at any rate in central position of the support (1), the belt (17) runs from the first connection point (23) in a zigzag configuration over the first and second timing pulleys (19, 21) to the second connection point (25).
2. A medical diagnostic apparatus as claimed in claim 1, characterized in that in the central position of the support (1) the zigzag configuration of the belt (17) is present because the belt (17) runs from the first connection point (23) along the first timing pulley (19), over the second timing pulley (21), over the first timing pulley (19) and along the second timing pulley (21) to the second connection point (25), in this order, at any rate, wherein, in the central position of the support (1), the first timing pulley (19) is positioned in closer proximity of the first connection point (23) than of the second connection point (25) and the second timing pulley (21) is positioned in closer proximity of the second connection point (25) than of the first connection point (23).
3. A medical diagnostic apparatus as claimed in claim 1, characterized in that the part of the belt (17) running from the second timing pulley (21) to the first timing pulley (19) is led over a third timing pulley (29) of the drive system (15), the third timing pulley (29) being located between the first and the second timing pulleys (19, 21) and between the support (1) and the belt (17).

4. A medical diagnostic apparatus as claimed in claim 1, characterized in that the support (1) comprises a C-arc to which the radiation source (3) and the radiation detector (5) are attached diametrically relative to each other and in which the radiation source (3) and the radiation detector (5) comprise an X-ray radiation source and an X-ray detector.